

Amendment to the Claims

This listing of claims will replace all prior versions and listings of claims in the above-referenced application.

1 – 97. (canceled)

98. (previously presented) A pest control agent comprising at least one recombinant baculovirus, wherein the at least one recombinant baculovirus directs transcription of a first ribonucleic acid (RNA) that, when present within an insect cell, hybridizes either with itself or with a second ribonucleic acid whose transcription is directed by the at least one recombinant baculovirus, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

99. (previously presented) The pest control agent of claim 98, wherein the first ribonucleic acid hybridizes with itself, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

100. (previously presented) The pest control agent of claim 98, wherein the first ribonucleic acid hybridizes with a second ribonucleic acid whose transcription is directed by the at least one recombinant baculovirus, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

101. (previously presented) The pest control agent of any of claims 98, 99, or 100, wherein the gene is an endogenous gene.

102. (previously presented) The pest control agent of any of claims 98, 99, or 100, wherein the insect cell is contained in an insect.

103. (previously presented) The pest control agent of claim 102, wherein the insect is a

Lepidopteran.

104. (previously presented) The pest control agent of claim 103, wherein the insect is selected from the group consisting of: the cotton bollworm (*Helicoverpa zea*), the cabbage looper (*Trichoplusia ni*), the alfalfa looper (*Autographa californica*), the tobacco hornworm (*Manduca sexta*), the tobacco budworm (*Heliothis virescens*), the fall armyworm (*Spodoptera frugiperda*), the European corn borer (*Ostrinia nubilalis*), the eastern spruce budworm (*Choristoneura fumiferana*), the western spruce budworm (*C. occidentalis*), and the gypsy moth (*Lymantria dispar*).

105. (previously presented) The pest control agent of any of claims 98, 99, or 100, wherein the insect cell is cultured *in vitro*.

106. (previously presented) The pest control agent of claim 105, wherein the insect cell is a *Lepidopteran* cell.

107 – 108. (canceled)

109. (previously presented) The pest control agent of any of claims 98, 99, and 100, wherein the gene is selected from the group consisting of: genes that are essential in a pest organism, genes involved in neurotransmission in a pest organism, genes involved in development in a pest organism, and genes expressed in the insect alimentary canal or Malpighian tubules.

110. (previously presented) The pest control agent of any of claims 98, 99, and 100, wherein the baculovirus is selected from the group consisting of: the *Autographa californica* multiple polyhedrosis virus, the *Orgyia pseudotsugata* MNPV, the *Lymantria dispar* MNPV, the *Helicoverpa zea* NPV, and the *Bombyx mori* NPV.

111. (previously presented) A pest control agent comprising an occlusion body containing a

plurality of recombinant baculoviruses, wherein each of the recombinant baculoviruses directs transcription of a first ribonucleic acid (RNA) that, when present within an insect cell, hybridizes either with itself or with a second ribonucleic acid whose transcription is directed by at least one of the recombinant baculoviruses, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

112. (previously presented) The pest control agent of claim 111, wherein the first ribonucleic acid hybridizes with itself, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

113. (previously presented) The pest control agent of claim 112, wherein the first ribonucleic acid hybridizes with a second ribonucleic acid whose transcription is directed by the at least one recombinant baculovirus, thereby forming a double-stranded structure that inhibits expression of at least one gene expressed in the insect cell.

114. (previously presented) The pest control agent of any of claims 111, 112, or 113, wherein the gene is an endogenous gene.

115. (previously presented) The pest control agent of any of claims 111, 112, or 113, wherein the insect cell is contained in an insect.

116. (previously presented) The pest control agent of claim 115, wherein the insect is a *Lepidopteran*.

117. (previously presented) The pest control agent of claim 116, wherein the insect is selected from the group consisting of: the cotton bollworm (*Helicoverpa zea*), the cabbage looper (*Trichoplusia ni*), the alfalfa looper (*Autographa californica*), the tobacco hornworm (*Manduca sexta*), the tobacco budworm (*Heliothis virescens*), the fall armyworm (*Spodoptera frugiperda*), the European corn borer (*Ostrinia nubilalis*), the eastern spruce budworm (*Choristoneura*

fumiferana), the western spruce budworm (*C. occidentalis*), and the gypsy moth (*Lymantria dispar*).

118. (previously presented) The pest control agent of any of claims 111, 112, or 113, wherein the insect cell is cultured *in vitro*.

119. (previously presented) The pest control agent of claim 118, wherein the insect cell is a *Lepidopteran* cell.

120 – 121. (canceled)

122. (previously presented) The pest control agent of any of claims 111, 112, and 113, wherein the gene is selected from the group consisting of: genes that are essential in a pest organism, genes involved in neurotransmission in a pest organism, genes involved in development in a pest organism, and genes expressed in the insect alimentary canal or Malpighian tubules.

123. (previously presented) The pest control agent of any of claims 111, 112, and 113, wherein the baculovirus is selected from the group consisting of: the *Autographa californica* multiple polyhedrosis virus, the *Orgyia pseudotsugata* MNPV, the *Lymantria dispar* MNPV, the *Helicoverpa zea* NPV, and the *Bombyx mori* NPV.

124. (previously presented) An insecticidal composition comprising the agent of claim 111 and an agriculturally suitable carrier.

125. (previously presented) The composition of claim 124 further comprising at least one agent selected from the group consisting of: conventional pesticides, gustatory stimulants, thickening agents, UV screening agents, optical brighteners, viral synergists, dispersants, flow agents, spreading agents, and sticking agents.

126 – 130. (canceled)

131. (previously presented) A method of controlling insects, the method comprising the step of: contacting a cell in an insect with a first ribonucleic acid (RNA) whose sequence corresponds to at least a portion of at least one gene endogenous to the insect, wherein the first ribonucleic acid hybridizes either with itself or with a second ribonucleic acid with which the cell is also contacted, thereby forming a double-stranded structure within the cell that inhibits expression of at least one gene expressed in the cell, wherein the step of contacting comprises contacting the insect with a baculovirus, and wherein the first RNA is expressed within 6 hours after the insect is contacted with the baculovirus.

132. (previously presented) A method of controlling insects, the method comprising the step of: contacting a cell in an insect with a first ribonucleic acid (RNA) whose sequence corresponds to at least a portion of at least one gene endogenous to the insect, wherein the first ribonucleic acid hybridizes either with itself or with a second ribonucleic acid with which the cell is also contacted, thereby forming a double-stranded structure within the cell that inhibits expression of at least one gene expressed in the cell, wherein the step of contacting comprises contacting the insect with a baculovirus, and wherein the RNA is expressed substantially in the absence of viral replication.

133. (previously presented) A method of controlling insects, the method comprising the step of: contacting a cell in an insect with a first ribonucleic acid (RNA) whose sequence corresponds to at least a portion of at least one gene endogenous to the insect, wherein the first ribonucleic acid hybridizes either with itself or with a second ribonucleic acid with which the cell is also contacted, thereby forming a double-stranded structure within the cell that inhibits expression of at least one gene expressed in the cell, wherein the step of contacting comprises contacting the insect with a baculovirus, and wherein the baculovirus does not establish a productive infection.

134. (previously presented) The method of claim 131, wherein the insect is a *Lepidopteran*.

135 – 137. (canceled)

138. (previously presented) The method of claim 131, wherein the gene is selected from the group consisting of: genes that are essential in a pest organism, genes involved in neurotransmission in a pest organism, genes involved in development in a pest organism, and genes expressed in the insect alimentary canal or Malpighian tubules.

139. (previously presented) The method of claim 131, wherein the baculovirus is selected from the group consisting of: the *Autographa californica* multiple polyhedrosis virus, the *Orgyia pseudotsugata* MNPV, the *Lymantria dispar* MNPV, the *Helicoverpa zea* NPV, and the *Bombyx mori* NPV.

140. (previously presented) The method of claim 131, wherein the step of contacting comprises applying the baculovirus to organisms on which the insect feeds.

141. (previously presented) The method of claim 131, whereby one or more biological or physiological functions of the insect is inhibited.

142 - 151. (canceled)